

**WHAT WE CLAIM IS:**

1. A torque transmission device, comprising:
  - an engine and a motor for generating driving torque;
  - an output shaft outputting the driving torque;
  - a planetary gear mechanism including a first rotating element rotating together with the engine, and a second rotating element connected to the motor, and a third rotating element connected to the motor;
  - a primary clutch selectively transmitting rotation of the second rotating element to the output shaft;
  - a secondary clutch selectively transmitting rotation of the third rotating element to the output shaft;
  - a primary brake selectively stopping the rotation of the third rotating element; and
  - a secondary brake selectively stopping the rotation of the second rotating element.
  
2. A torque transmission device, according to claim 1, wherein the planetary gear mechanism is a double-pinion type planetary gear mechanism, the first rotating element corresponds to a sun gear, the second rotating element corresponds to a carrier, and the third rotating element corresponds to a ring gear.